

AMENDMENTS TO THE CLAIMS

1. (Withdrawn) An ultra-wide bandwidth low radar cross-section microwave antenna capable of operating between 1 GHz and 18 GHz with a VSWR of less than 2:1, comprising:
a ground plane; and,
a cone spaced from said ground plane and having an apex with an apex base size that establishes a high frequency cutoff of at least 18 GHz, the size of the apex of said cone being such as to establish an 18 GHz high frequency cutoff, the size of said cone establishing a 1 GHz low frequency cutoff, the cone antenna being fed at the apex of said cone.
2. (Withdrawn) The antenna of Claim 1, wherein the conical surface of said cone is edgeless.
3. (Withdrawn) The antenna of Claim 1, wherein the conical surface of said cone is multi-sided.
4. (Withdrawn) The antenna of Claim 2, wherein said cone is pyramid-shaped.
5. (Withdrawn) The antenna of Claim 1, wherein said cone includes a non-conical portion at the wide portion of said cone for extending the height thereof without increasing the size of the wide portion of said cone.
6. (Withdrawn) The antenna of Claim 1, wherein said cone is solid.

7. (Withdrawn) The antenna of Claim 1, wherein said cone is hollow.
8. (Withdrawn) The antenna of Claim 1, wherein said antenna has a 100-watt CW rating.
9. (Currently amended) A method for ~~increasing the~~ providing an ultra-wide bandwidth of ~~a monocone-monopole antenna having at least a 10:1 frequency ratio, comprising the step-steps~~ of:

 providing a monocone in spaced adjacency to a ground plane;

 ~~increasing the size of a~~ sizing the height and the cone angle of the monocone antenna to

 establish a low frequency cutoff;

 ~~sizing without increasing the size of the apex base thereof of the monocone, thus to~~

 ~~decrease the low frequency cutoff of the monocone antenna without affecting to establish the~~

 high frequency cutoff of the monocone antenna; and,

 feeding the antenna between the apex and ground plane.
10. (Cancel)
11. (Original) The method of Claim 9, wherein the cone angle of the monocone is between 24° and 30°.
12. (Original) The method of Claim 9, wherein the apex base diameter is .065"

13. (Original) The method of Claim 9, wherein the height of the cone is 1.6” and the width of the widest part of the cone is 1.95.”

14. (Original) The method of Claim 9, wherein the cone has a non-conical extension on top thereof, wherein the combined height of the cone and extension is 1.6” and wherein the width of the widest part of the non-conical extension is 1.5.”

15. (Currently amended) The method of Claim 9, ~~wherein the monocone is mounted in spaced adjacency to a ground plane and~~ wherein the antenna pattern of the monocone antenna is substantially omnidirectional to the side of the ground plane that the cone is located.

16. (Original) An omnidirectional ultra-wide bandwidth low radar cross-section antenna for use in the microwave band, comprising:

a ground plane; and,

a monocone spaced from said ground plane, said antenna being fed at the apex of said monocone, said apex having a base size that establishes an 18:1 frequency ratio for said antenna.

17. (Original) The antenna of Claim 16, wherein said base size establishes the high frequency cutoff of said antenna and wherein the overall size of said monocone establishes the low frequency cutoff of said antenna.

18. (Original) The antenna of Claim 17, wherein said antenna is operable over the microwave region of the electromagnetic spectrum and has a VSWR of less than 2:1.
19. (Original) The antenna of Claim 16, wherein said antenna has a 100-watt CW rating.
20. (Original) The antenna of Claim 16, wherein said monocone is solid.